

the hairs, those in the vertebral area being pointed with brownish black. It appears to be a larger animal than the mule deer of the Eastern Desert Tract, and, unless the specimens brought home by our party are abnormal, its horns are heavier and more divergent, being remarkable for the great length of the beam before forking. In a youngish specimen from the Sonoyta Valley (No. 59910, U.S.N.M.), the distance from the burr to the first fork, following the curve of the beam, is 320 mm. The total expanse of this pair of horns is 620. They are doubly dichotomous throughout, having four points, besides a basal snag, on each horn. Another pair (No. 60855, U.S.N.M.) belonged to a fully adult animal, killed at Black Butte, on the Colorado Desert near the "volcanoes" or mud geysers, Lower California. This was one of six that were killed by Mr. Samuel Cameron, one of our guides, during the winter of 1893-94. The beam is unusually stout, and has an extent of 310 mm. before forking, and the horns have a total expanse of 775. The horns are also doubly dichotomous.

NEW SPECIES OF COLEOPTERA OF THE FAMILY
CHRYSOMELIDÆ, WITH A SHORT REVIEW OF THE
TRIBE CHLAMYDINI.

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THE collections made by the entomologists of the United States Department of Agriculture in the course of their investigations of the cotton-boll weevil and other insects in southwestern Texas contain several species of Chrysomelidæ that are not hitherto described, and others that had previously only been recorded from Mexico. While rearranging the material of this family in the collection of the United States National Museum, it was found advisable to place on record such species as are new to our faunal list. This paper includes also a few forms obtained by the Museum from other sources.

The tribe Chlamydini has been much neglected by students in recent years, and a study of available material has enabled the writer to attempt a brief review of this group.

Genus MEGASCELIS Latreille.

Megascelis LATREILLE, Cuvier, Règn. anim., 2d ed., V, 1829, p. 138.

This neotropical genus belongs in the tribe *Sagrinæ*, and differs from *Lema* by the mouth being short and rounded instead of being prolonged into a distinct muzzle. The claws are connate at base, and the sides of the thorax are obtusely angulate, not crenulate or spinose. One species has been found in Texas that appears to be undescribed.

MEGASCELIS TEXANA, new species.

Elongate, parallel, rufotestaceous; bright green above. Antennæ much shorter than the body, infusate, with the four basal joints testaceous. Front coarsely rugosely punctate. Eyes distinctly emarginate. Thorax as long as broad, distinctly impressed across the disk, constricted at base, deeply and densely punctate, sparsely pubescent. Elytra with margin and sutural stripe testaceous, the latter narrow at base and apex, often dilated at middle; disk rather densely pubescent, with short, erect

griseous hairs, deeply punctatostriate; intervals transversely cribrate; apices rounded without sutural spine. Ventral surface either uniformly testaceous or more or less greenish on the sides of metasternum, covered with a fine, sparse, silvery gray pubescence. Legs entirely testaceous, femora simple. Length, 3 to 4 mm.

Type.—No. 1289, U.S.N.M. Nineteen examples collected in May and June at Brownsville, Texas, by Professor C. H. Tyler Townsend and Mr. E. A. Schwarz.

This species is nearly allied to the Mexican *M. delecta* Clark, and *M. suturalis* Lacordaire, but differs from the former by lacking sutural spines and from the latter by the sutural stripe and elytral margin being testaceous.

LEMA LONGIPENNIS, new species.

Body elongate, as in *L. texana* Crotch, but larger and with color and sculpture of *L. collaris* Say, from which it differs as follows: Much larger, collum red, median frontal groove terminating in a round fovea on vertex, thorax a little longer proportionately, distinctly and broadly constricted near the base and with the sides more gibbous in front; scutellum elongate, subtriangular, with apex rounded (in *L. collaris* semioval, subtruncate at apex); elytra two and one-half times longer than broad (in *L. collaris* only twice). Length, 6.5 mm.

Type.—No. 1290, U.S.N.M. Five examples, Canon City, Colorado (Wickham).

LEMA JACOBINA, new species.

Elongate, shining, reddish-yellow, with a spot at apical fourth of each elytron, suture, the seven outer joints of the antennae and apices of tarsal joints black. Thorax as long as broad, moderately constricted behind the middle, impunctate. Elytra broadest at base, regularly convex, deeply punctate in regular striae, the ninth broadly interrupted; the marginal stria impressed from the base, the others only at apex. Ventral surface and legs sparsely and finely punctate, finely pubescent. Length, 5 mm.

Type.—No. 1292, U.S.N.M. One example, collected at San Diego, Texas (May 26), by Mr. E. A. Schwarz, who recognized it as undescribed and labeled it with the manuscript name used above.

This species is allied to *L. 6-guttata* Olivier, but is smaller, more elongate, has no impressions on the disc of the elytra, and has also a different coloration.

LEMA LEBIODES, new species.

Moderately broad, rufotestaceous, shining; mouth, sides of head, coxae and side pieces of meso- and metathorax black. Antennae slender, ferruginous. Head sparsely punctate, vertex nearly smooth, with a small round fovea. Thorax broadest at base, deeply constricted behind the middle, impunctate. Elytra parallel, slightly depressed on the disc one-third from the base, ferruginous, with a large square scu-

tellar spot and a longitudinal vitta black, the latter starting from the humerus, widened behind to the suture and interrupted before the apex; striae regular, of rather strong punctures, the ninth not interrupted. Ventral surface and legs sparsely and finely punctulate, finely pubescent. Length, 5.5 mm.

Type.—No. 1291, U.S.N.M. One example collected at Brownsville, Texas, by Professor C. H. T. Townsend.

This species has the form of *L. conjuncta* Lacordaire, but is very much smaller, has the elytra more strongly punctate, and is different in coloration.

LEMA COLORADENSIS, new species.

Shortly oblong, parallel, shining. Head red, sparsely and finely punctulate, labrum and apices of palpi infusate; front strongly bituberculate; eyes emarginate. Antennae stout, shorter than half the body, slightly incrassate toward the apex, black; basal joint entirely and second to fourth on the lower surface red. Thorax red, subparallel, slightly longer than broad, obsoletely punctulate on the disc, moderately constricted at the sides behind the middle; the transverse basal constriction obsolete, with a small impressed fovea on the median line. Scutellum red, quadrate, emarginate at apex. Elytra bluish-green, convex, obsoletely impressed on fourth from the base; ten regular rows of moderately close punctures, the intervals somewhat rugose by finely impressed, irregular scratches. Thorax beneath red, sparsely pubescent. Abdomen shining black, nearly impunctate; last ventral rufous at apex. Legs red, the posterior femora slightly more incrassate than the others, reaching the base of the third ventral segment. Length, 4 mm.

One example from Greeley, Colorado, in collection of Messrs. Hubbard & Schwarz.

This species is closely allied to *L. brunnicollis* Lacordaire, but has the thorax and elytra slightly more elongate and a different coloration of the head and legs.

LEMA CONFUSA Chevrolat.

Lema confusa CHEVROLAT, Col. Mex. Cent., II, 1835, No. 116.—LACORDAIRE, Mon., p. 409.—JACQUELIN, Duv., Hist. Cub. Ins., p. 282, pl. XI, fig. 3.

Recorded from Mexico and Cuba, this species has also been collected at Enterprise and Crescent City, Florida, by Messrs. Hubbard & Schwarz. It is allied to *L. conjuncta*, but is smaller and less robust. The color is shining black; elytra yellow, with a sutural stripe, expanded at apex, and an abbreviated discal stripe, black. It varies with the elytral stripes confluent and the abdomen black or yellow.

Genus CHLAMYS Knoch.

Chlamys Knoch, Nen. Beytr. Ins., I, 1801, p. 122.

ANALYTICAL KEY TO THE SPECIES OF CHLAMYS.

Antennæ with third and fourth joints subequal, slender.

Legs maculate, body subquadrate, pubescent... *C. maculipes* Chevrolat. (p. 476).

Legs black, body subquadrate, metallic.

Metascutellum visible, elytra with velvety-black foveæ on disc.

C. memnonia Lacordaire. (p. 476).

Metascutellum not visible, intervals of elytra uniform.

Elytral intervals sparsely punctate.

Sides of thorax densely strigose..... *C. plicata* Fabricius. (p. 478).

Sides of thorax obsoletely strigose... *C. tuberculata* Klug. (p. 479).

Elytral intervals densely, deeply punctate.

C. cribripennis Le Conte. (p. 479).

Legs red, body oblong, black, opaque..... *C. foreolata* Knoch. (p. 479).

Antennæ with fourth joint broadly dilated, body oblong, ferruginous.

C. arizonensis, new species. (p. 479).

CHLAMYS MACULIPES Chevrolat.

Chlamys maculipes CHEVROLAT, Col. Mex. Cent., II, 1835, No. 120.—LACORDAIRE, Mon., p. 660.

This species, which is not uncommon in Mexico and Nicaragua, has lately been collected at Brownsville, Texas, by Mr. E. A. Schwarz and Professor C. H. T. Townsend. It is oblong quadrate, greenish black above, pubescent and densely rugosely punctate. The gibbosity of the thorax is rounded, without crest, and has two polished black spaces on the anterior surfaces. The elytra have small obtuse isolated tubercles, one on the basal lobe, four in an oblique line from the humerus to the middle of the suture, one near the lateral sinus, and three or four posteriorly. The ventral surface, pygidium and legs are ferruginous, varied with black. The head is entirely ferruginous in the Texan specimens. The antennæ are longer and more slender than in the *plicata* group.

CHLAMYS MEMNONIA Lacordaire.

Chlamys memnonia LACORDAIRE, Mon., p. 785.

From southern Arizona and southwestern Texas there have long been represented in American collections certain roughly sculptured forms of *Chlamys*, supposed generally to be merely varieties of *C. plicata*. A closer examination shows that these forms differ materially, not alone in sculpture, but in the remarkable character of having a visible second scutellum. In *C. plicata* the metanotum, on removing the elytra, shows a fine carina, which in *C. memnonia* becomes very strongly developed, and in most individuals becomes visible, between the applied elytra, behind the ordinary scutellum as a long, narrow second scutellum. This

appearance is further facilitated by a depression and slight emargination of the edges at this place, the serration of the elytral suture being interrupted some distance behind the mesoscutellum in all the *Chlamys* of the *plicata* group. There is, however, a marked individual variation, and specimens occur that by their sculpture evidently belong to *C. memnonia*, but still show no second scutellum. On the other hand, one example of the ordinary *C. plicata* has been observed with metascutellum visible. Mr. Jacoby¹ has noted this variation, but nevertheless transfers *C. memnonia* to Lacordaire's genus *Diaspis*, founded upon a Mexican species, *D. paradoxa*, which was the only coleopteron recorded with two scutella previous to Mr. Jacoby's observation.

Another structure in these beetles still more remarkable for its variability is the form of the mesoscutellum. In *C. plicata* this is ordinarily subquadrate, slightly broader behind, with acute hind angles and three subequal acute teeth, plainly visible in front. Occasional specimens, however, occur with the scutellum as much as one-half broader than long. In *C. memnonia* the width is sometimes more than twice the length. The lateral teeth are deflexed in front and concealed by the thoracic lobes. The posterior angles are rounded, imparting an entirely different appearance when viewed from above. Some specimens have the scutellum narrower, with the teeth more visible, in which case, if the metascutellum also happens to be concealed, they are distinguishable from *C. plicata* only by the sculpture of thorax and elytra. After diligent search for specific characters to separate the specimens with two scutella obtained at Brownsville and San Diego, Texas, from those taken in southern Arizona, I have reached the conclusion that all belong to one variable species, namely, *Chlamys memnonia* Lacordaire. All specimens collected by Belfrage at Waco, Texas, that I have seen, are *C. plicata*. The characters for *C. memnonia* may be summarized as follows:

Thorax with distinct lateral tubercle and scattered coarse punctures; the gibbosity on all sides rugosely scabrous and deeply bifid at summit. Scutellum generally about twice broader than long and with one visible lobe in front. Metascutellum exposed. Elytra with acutely elevated tubercles, the four in the humero-median line forming a sinuous ridge, connected by longitudinal ridges with the tubercle on the basal lobe and with the juxti-scutellar tubercle, including a deep, round velvety black fovea on the disk just in front of the strong transverse median tubercle, that terminates the humero-median ridge; generally there is another similar black fovea between this ridge and the lateral carina; the latter is strongly developed and arcuate; on the posterior half of each elytron are five other more isolated tubercles. The intervals are finely rugose and coarsely, sparsely punctured. Pygidium coarsely reticulately rugose. Average size somewhat larger than *C. plicata*.

¹ Biol. Cent.-Amer., Ins. Col., VI, Pt. 1, p. 74 and Suppl., p. 155.

CHLAMYS PLICATA Fabricius.

Chlamys plicata FABRICIUS, Ent. Sys. Supp., p. 111.—OLIVIER, Ent., VI, p. 876, pl. 1, fig. 3 a-b.—LACORDAIRE, Mon., p. 701.—CROTCH, Proc. Phil. Acad. Sci., XXV, p. 30.

After separating the preceding forms specifically there still remains *C. plicata*, a species very variable in sculpture. The thorax is strigose over the whole surface and the tubercles on the sides of the disk are obsolete and without coarse punctures; the central gibbosity has never any punctures on its posterior surface, but the anterior face and the crest are variable, being impunctate or having smaller shallow foveæ. These latter, however, are never coarse and confluent; the summit is more or less bifid and the longitudinal channel is obsolete or impressed. The elytral sculpture is still more variable, but the tubercles are never as large and as acutely ridged as in *C. memnonia*. The tubercle on the basal lobe is always distinct and isolated, but varies in size; the juxta-scutellar and post-scutellar tubercles are often entirely absent and when present are isolated, and never connected with the median ridge. The small spiny ridge along the sutural edge at the base, nearly always present in *C. memnonia*, is here totally wanting, and the surface is flat. The tubercles of the humero-median range are either isolated or connected in an undulating ridge, but are never connected with the basal or scutellar tubercles; the lateral carina is seldom entire, generally broken up, and the anterior part is often developed transversely; the posterior tubercles are more or less developed; the intervals between the tubercles are uniform, never showing any velvety foveæ, always sparsely punctate, either flat or covered with numerous smaller tubercles. The pygidium has a median carina and a fovea each side at apex; the balance of the surface varies from flat to coarsely reticulate.

By a careful study of the characters used for separating *C. assimilis* Klug, and *C. polycoeca* Lacordaire, I have been unable to find even local races where they are at all constant. Both are said to differ from *C. plicata* in having impunctate, obsoletely canaliculate gibbosity of the thorax and the lateral carina of the elytra are divided; *C. polycoeca* should differ from *C. assimilis* in the more isolated elytral tubercles.

Specimens from the Middle and Northern States agree best with the descriptions of these two forms, and the more roughly sculptured individuals from Florida and Texas should be the true *C. plicata*, but I have seen occasional female specimens from New York or the District of Columbia as rough as any from the farthest South and *vice versa*, smoother specimens from Texas and Florida. Moreover, the characters used for their separation are very rarely combined in any one individual. Consequently I am forced to consider *C. polycoeca* and *C. assimilis* as merely synonyms of *plicata* and not even entitled to rank as races.

CHLAMYS TUBERCULATA Klug.

Chlamys tuberculata KLUG, Ent. Mon., pp. 117, 122, pl. VIII, fig. 1.—LACORDAIRE, Mon., p. 808.

A small form collected by Mr. E. A. Schwarz, at Enterprise, Florida, agrees exactly with the description of Klug's species. It has the form of *C. plicata*, is bright cupreous; the thorax is obsoletely strigose at the sides with some small punctures; the tuberosity is densely strigose, and on the anterior surface sparsely punctate. The scutellum is slightly transverse. The elytra are very feebly sculptured, the humero-median series consisting of two fine arcuate ridges, obsoletely connected with the basal tubercles; the lateral carina and the posterior tubercles are isolated and small; the intervals nearly flat, sparsely, rather finely punctate. The length is 2.5 mm.

Lacordaire mentions a black variety and gives the locality of the species as "Carolina."

CHLAMYS CRIBRIPENNIS Le Conte.

Chlamys cribripennis LE CONTE, Proc. Am. Phil. Soc., XVII, p. 614.

I have seen in the collection of Messrs. Schwarz and Hubbard two specimens collected at Detroit, Michigan, the same locality which supplied Doctor Le Conte with the type of the species. The size is small, not quite 3 mm.; the thorax is nearly impunctate, strigose, and the crest of the tuberosity is feebly bifid. The elytra have feeble tubercles, but the intervals are deeply and more densely punctate. The labrum is pale in the one and black in the other specimen.

The rather dense and strong punctation of the elytra seems to indicate this to be a valid species, as small specimens of *C. plicata* have very obsoletely punctate elytra.

CHLAMYS FOVEOLATA Knoch.

Chlamys foveolata KNOCH, Neu. Beytr., I, p. 130, pl. IV, fig. 9.—LACORDAIRE, Mon., p. 835.—CROUCH, Proc. Phil. Acad., XXV, p. 30.

Of this species there is in the National Museum a specimen collected by Belfrage in Waco, Texas. It is elongate, subcylindrical, black, opaque; front, mouth parts, antennæ, and legs ferruginous. Thorax reticulately, longitudinally strigose, the elevation broad, without crest, broadly but not deeply canaliculate. Elytra reticulately carinate, deeply punctate. Pygidium with a fine median carina, punctate and not foveolate. Length, 2.7 mm.

CHLAMYS ARIZONENSIS, new species.

Oblong, subcylindrical, ferruginous; antennæ pale ferruginous, last four joints black; third joint as long as second, triangular; fourth joint transverse, nearly as broad as fifth. Head flat, alutaceous, obsoletely

punctate; clypeus more strongly punctate. Thorax rather long, very densely, deeply punctate; sides convex, median gibbosity rounded, obsoletely broadly canaliculate; a blackish spot on the middle and some indefinite brownish spots on the sides. Scutellum slightly transverse, with prolonged hind angles and margined with black. Elytra parallel, margined with black at base and with a rectangular brown sutural spot behind the middle, deeply punctate in bigeminate striae, which are irregular at base and apex; the elevated tubercles are few and smooth; the basal and juxtascutellar ones are united on the basal margin, the median sutural and the lateral are transverse; an oblong one is on the disk posteriorly and another one is humeral, all being united by narrow longitudinal carinae. Pygidium flat, rather sparsely punctate. Ventral surface varied with paler and darker ferruginous; femoral grooves deep black. Legs immaculate, tarsi moderately broad. Length, 3 mm.

Collected by H. K. Morrison in southern Arizona.

Type.—No. 1298, U.S.N.M.

Genus EXEMA Lacordaire.

EXEMA GIBBER Olivier.

Chlamys gibbera OLIVIER, Ent., VI. p. 876, pl. I, fig. 14.—CROUCH, Proc. Phil. Acad. Sci., XXV, p. 30.

Oblong quadrate, dark cupreo-aeneous; antennae labrum and tarsi beneath pale. Thorax and elytra densely punctate and acutely tuberculate. Prosteronum concave. Length, 2 to 3 mm.

All specimens that I have seen are from Florida and Louisiana.

EXEMA CONSPERSA Mannerheim.

Chlamys conspersa MANNERHEIM, Bull. Moscow, 1843, II, p. 311.

Chlamys rugulosa MANNERHEIM, Bull. Moscow, 1845, I, p. 109.

Oblong quadrate, black without metallic luster, more or less spotted with yellow. Thorax and elytra with obtuse tubercles. Prosteronum flat. Length, 2 to 2.5 mm.

Occurs from Atlantic to Pacific States. *E. dispar* Lacordaire, is a synonym. Specimens from southern California and Arizona are generally more maculate and less coarsely sculptured.

CRYPTOCEPHALUS PUBICOLLIS, new species

Cylindrical, deep black, shining, densely grayish pubescent; elytra glabrous with red humeral spot. Antennae slender, entirely black, the five basal joints subglabrous. Head sparsely punctate, smooth and glabrous on the median line. Thorax very convex, as broad as elytra, densely punctate at the sides, smoother and less pubescent at the middle. Elytra moderately strongly punctate in regular striae, the marginal stria impressed the whole length and the submarginal at

apex; red humeral spot extending along the base to the third or fourth stria and covering the whole of the epipleural lobe, inclosing a dark cloud on the umbone. Pygidium coarsely punctate, with a fine median carina toward apex. Length, 6 mm.

Male.—Antennæ nearly as long as the body. Prosternum, with a strong recurved cusp at apex, emarginate behind. Last ventral vaguely impressed and glabrous at middle. Posterior femora reaching the apex of elytra; posterior tibiæ straight, globosely expanded at apex.

Female.—Antennæ much shorter than the body. Prosternum flat in front. Last ventral with a very deep, smooth, circular fovea. Posterior femora reaching to the apex of the third segment; tibiæ simple.

One male and two females in the collection of Messrs. Hubbard and Schwarz, collected in southern Arizona by H. K. Morrison. One of these examples has been presented to the National Museum.

Type.—No. 1307, U.S.N.M.

The species should take its place after *C. basalis* Suffrian, from which it differs by the more globose thorax and the glabrous elytra.

COLASPIDEA SUBVITTATA Fall.¹

Elongate, cupreous green, less shining, sparsely clothed with long recumbent white pubescence; labrum, base of antennæ and legs rufous. Head slightly convex, with a shallow rounded impression between the eyes, finely and sparsely punctate. Thorax finely and sparsely punctate, side margins feebly rounded, anterior angles strongly deflexed. Elytra more densely and coarsely punctate than the thorax; each with three impunctate glabrous lines on the disk that become obsolete at apex. Ventral surface more cupreous, with shorter pubescence, moderately densely punctate. Femora with metallic luster on the upper side. Length, 3.8 mm.

Type.—No. 1293, U.S.N.M. Collected on Santa Catalina Island, California, by Mr. H. C. Fall. One example presented to the National Museum by Mr. E. A. Schwarz.

This species has the form and appearance of a *Graphops*, but has no trace of supraorbital groove and the postocular lobes are well developed. The prosternum is broad and flat, as in the three Californian species, placed by Doctor Horn in the genus *Colaspidea*. It comes nearest to *C. cuprascens*, but is readily separated by its much longer pubescence and the smooth discal lines of elytra.

METACHROMA VITICOLA, new species.

Oblong, shining, rufocastaneous, elytra and legs paler. Antennæ ferruginous, with last five joints infusate. Head nearly smooth, with

¹ [Subsequent to the completion of the manuscript of this paper a description of this species was published by Mr. H. C. Fall (Canadian entomologist, vol. 29, No. 10, October, 1897, p. 243), and the name proposed by Mr. Linell has, therefore, been suppressed.—E. A. Schwarz.]

a distinct frontal impression; clypeo-frontal suture obliterated; clypeus sparsely and vaguely punctate. Thorax wider than long, narrowed at apex; sides strongly arcuate; angles slightly auriculate; disk very convex, obsoletely punctulate. Elytra striato-punctate, the punctures coarse but not close, somewhat finer toward apex, but not obliterated; the short striae regular. Propleura and metasternum smooth; prosternum between the coxae rugose; abdomen sparsely and finely punctate. Posterior femora simple. Length, 4.5 mm.

Type.—No. 1294, U.S.N.M. Five examples from Brighton, Texas, collected June 27 by Mr. J. Taylor, who reported the species to the Department of Agriculture as injurious to grape.

This species resembles *M. ustum* Le Conte, but is much smaller, has simple femora, antennae infusate at apex, body darker beneath, and the elytral striae distinct to apex.

PLAGIODERA PURPUREA, new species.

Elongate, oval, feebly convex, violaceo-purpureous. Head coarsely punctate; clypeal suture arcuate, distinct. Thorax moderately densely punctate; sides feebly convergent from the base, broadly rounded toward apex; anterior angles prominent. Scutellum large, semioval, alutaceous. Elytra strongly striato-punctate; intervals obsoletely punctulate, finely alutaceous. Ventral surface sparsely punctate. Length, 4.8 mm.

Type.—No. 1295, U.S.N.M. Three examples from southwestern Utah (from Mr. Charles Palm, of New York).

This species approaches in form the largest varieties of *P. prasinella* Le Conte, but is distinct by its larger size, purplish color, parallel-sided thorax, and elytral punctation.

PLAGIODERA THYMALOIDES Stål.

Plagioder a thymaloides STÅL, Diagn., 1860, p. 468; Mon., p. 311.—CHEVROLAT, Dejean, Cat., 3d ed., p. 428.

The above-mentioned species, previously recorded from Mexico and Central America, was collected in June, 1896, in Brownsville, Texas, by Professor C. H. T. Townsend. It is nearly circular, with crescent-shaped thorax and convex elytra, resembling a *Coccinella*; color fulvous, with disk of thorax and elytra aeneous. Following our classification, it belongs in the genus *Lina* after *L. arizonae* Crotch.

PHYLLOBROTICA NIGRITARSIS, new species.

Elongate, parallel. Head entirely yellow, smooth. Antennae black, the three basal joints yellow, the third nearly as long as fourth. Thorax broader than long, smooth, yellow, slightly narrowed behind. Elytra yellow, each with two piceous spots, one at base small and a larger oblong one behind the middle; surface sparsely finely punctate and

alutaceous. Ventral surface moderately finely punctate, sparsely pubescent, black; prothorax and metasternum yellow. Legs yellow, tarsi black.

Male.—Abdomen convex, uniformly pubescent; second to fourth segment equal, with straight margins; fifth slightly longer, with a deep cupuliform fovea, the margin with a truncate lobe at middle, limited by a deep notch each side; last dorsal deeply semicircularly emarginate. Posterior tibiae slightly arcuate. Length, 6.5 mm.

Three males and one female from Kansas, Nebraska, and Texas (Coll. Belfrage).

Type.—No. 1309, U.S.N.M.

PHYLLOBROTICA SORORIA Horn.

Phyllobrotica sororia HORN, Proc. Cal. Acad. Sci., 2d ser., VI, p. 378.

Doctor Horn (loc. cit.) describes this species from a female specimen from Burnett County, Texas. In the National Museum are three specimens from Waco, Texas (Coll. Belfrage), one male and two females. The male is remarkable as being the only one in the genus with differentiated antennae. The claws of this species are nearly bifid. The male characters are as follows:

Antennae longer, the basal joint more inflated, entirely yellow; the three terminal joints distinctly incrassate, yellow. Ventral segments convex, with straight hind margins, uniformly pubescent; the fifth slightly longer, with triangular notch at apex; last dorsal feebly emarginate. Posterior tibiae arcuate. First tarsal joint more incrassate.

Type.—No. 1310, U.S.N.M.

The male of *D. decolorata* Say, has the first to fourth ventral segments more or less deeply impressed along the middle and glabrous, and the hairs are longer and denser on each side of this channel; the second to fourth are broadly and deeply emarginate, leaving the fifth largely exposed.

DIAEROTICA NITIDA, new species.

Elongate oval, very shining. Antennae three-fourths the length of the body, slender, piceous, the three basal joints paler; second joint small, the third as long as the fourth. Head polished, black, vertical fovea small. Thorax pale yellow, feebly convex, scarcely wider than long; sides feebly arcuate in front, parallel behind; posterior angles acute; disk smooth, bifoveate. Scutellum black. Elytra ivory-white; a sutural and humeral vitta, nearly reaching the apex, shining black; punctures fine, not close, irregularly disposed; two rather feeble, smooth costae in the dorsal ivory stripe. Ventral surface yellowish-white, metasternum piceous. Legs piceous, basal half of femora pale. Tibiae carinate toward the base only. Length, 4.5 to 5 mm.

Male.—Last ventral segment broadly emarginate.

Type.—No. 1296, U.S.N.M. Collected in New Mexico by Professor F. H. Snow and at San Diego, Texas, by Mr. E. A. Schwarz.